DOCUMENT RESUME

ED 322 625 EA 022 147

AUTHOR Sungaila, Helen
TITLE Organizations Alive! Have We At Last Found the Key to a Science of Educational Administration? CCEA Studies in Educational Administration, Number 52.
INSTITUTION Commonwealth Council for Educational Administration, Armidale (Australia).
REPORT NO ISBN-90986-50-8
PUB DATE May 90
NOTE 29p.
AVAILABLE FROM Publication Sales, Commonwealth Council for Educational Administration, University of New England, Armidale, New South Wales 2351, Australia (Publication No. NBP2501, $2.50).
PUB TYPE Collected Works - Serials (022) -- Information Analyses (070) -- Viewpoints (120)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Bureaucracy; *Educational Administration; Elementary Secondary Education; Foreign Countries; *Holistic Approach; Institutional Administration; Institutional Mission; *Naturalism; Organizational Effectiveness; *Organizational Theories; Systems Approach; Theory Practice Relationship
IDENTIFIERS Australia

ABSTRACT

Application of the new naturalism, a synthesis of the natural and social sciences based on the concept of the living system as a self-renewing and self-organizing structure, to educational administration, is the topic of this paper. The new naturalism promises not only a synthesis of the natural and social sciences, but also one of contemporary thought in educational administration. An implication for policy making is that in conceptualizing education as a living system, administrators must consider the structures of expectations that influence the system's decision-making processes. The cultural, material, and political contexts in which the systems operate must be understood in order to affect organizational change. (34 references) (LMI)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

B. Kings

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED322625

Studies in Educational Administration

CCEA

COMMONWEALTH COUNCIL FOR EDUCATIONAL ADMINISTRATION

Number 52
May 1990

ORGANIZATIONS ALIVE!
Have We at Last Found the Key to a Science of Educational Administration?

Dr Helen Sungaila

Helen Sungaila is both an educator and a barrister. She gained her doctorate in educational administration and also has a diploma in law from the Supreme Court of New South Wales. With thirty years' teaching experience ranging from primary to secondary headship, she is now a senior lecturer in the University of New England. She has published widely in Australia and overseas and is an innovative researcher. Dr Sungaila's present research interest in organizations as living systems is testimony to her creative approach to administration.

Registered by Australia Post

Publication No. NBP2501

ISBN 90986 50 8

The CCEA is located at the University of New England, Armidale, N.S.W. 2351, Australia.

BEST COPY AVAILABLE

EA 022 147

COMMONWEALTH COUNCIL FOR EDUCATIONAL ADMINISTRATION

CCEA is an association of international educational administrators, people who share the same philosophy of – co-operation, shared values and concern for people in a strong, functional, professional network.

CCEA provides:

* a focal point for educational administrators and all those concerned with educational administration;
* a commitment to the improvement of the quality of administration and the professional enrichment of administrators;
* an organisation which belongs to and serves the Commonwealth of Nations;
* a world network of friends and colleagues;
* a service with minimum administrative costs.

WHY NOT JOIN US?

Send us a postcard for full details.

ORGANIZATIONS ALIVE!
Have We at Last Found the Key to a Science of Educational Administration?

Shallow ideas can be assimilated; ideas that require people to reorganize their picture of the world can provoke hostility.

James Gleick, 1987

Have We a New Beginning?

I am convinced that we have! Such are the profound happenings both in the sciences and in the humanities, that it seems fair to say that we have reached a new watershed in human thinking. There is a "great feeling of intellectual excitement in the air" (Prigogine and Stengers, 1984). Just when we thought our society (and our world of educational administration) was simply "too large and too complex to be immediately understandable, its unity ... not accessible, neither by experience nor by action" (Lumann, 1984, p.59), *we have reached a new scientific understanding of how our world works*. "Most of reality, instead of being orderly, stable and equilibrial is seething and bubbling with change, disorder and process" (Toffler, in Prigogine and Stengers, 1984, p.xv). There is chaos in order: a disorderly order. There is order in chaos: an orderly disorder. These principles are being discovered at many different levels of reality, from the pre-cellular through to the social-cultural. Truly an "historic transformation of science" is taking place (Toffler in Prigogine and Stengers, 1984, p.xv). A synthesis of the natural and the social sciences is emerging. It is called the new naturalism. "Humans and their systems of life" are being discovered to be "a profoundly *natural* way of life" (Jantsch, 1981, p.8, emphasis mine).

What Does it Mean?

No longer, then, can we confidently assert that "the social sciences differ fundamentally from the natural sciences"; and that "their methods and basic logic of inquiry must also differ" (Greenfield, 1980, p.51). No more do we have to concede reluctantly that we cannot address the normative, social, and political elements of administrative practice in a science of administration. No longer do we need to divide ourselves into these two bitterly opposed camps described by Griffiths (1983): the one, those who are now proclaiming that our effort - whole professional lifetimes of effort - "to study administrative and organizational life through the

behavioral science is nonsense", and the other, "those who believe there can be developed scientific theories of educational administration ..." (p.208).

Attempts have been made to vindicate the idea of a science of educational administration (Holmes, 1986) - or at least to explain why so many scholars have been reluctant to relinquish it (Ryan, 1988). But the idea has been observed to be steadily losing ground (Lakomski, 1987).

Moreover, the public is seemingly dissatisfied with educational systems. Professors of educational administration have discovered the cause for this dissatisfaction in the poor administration of such systems, which, in turn, is seen to be the result of quite inappropriate professional development programs for would-be practitioners. These are the programs which have attempted to be theory-based and research oriented. However, as Dalin (1978, p.1) wisely pointed out: "Dissatisfaction with schools is not a new phenomenon. Schools have been the focus of public concern for nearly as long as they have existed".

Further, the politicians do not view the matter of public disaffection with their educational systems this way. Their response is simply to re-organize systemic structures. Thus the politicians come to possess their educational era personally. It is written down in history as the era of *their* grand scheme for educational reform. But has no one yet pointed out to the politicians that, as James March has observed, "Changing education by changing educational administration is like changing the course of the Mississippi by spitting in the Allegheny"? Such a comment does rather put in question the current world-wide spate of systemic re-organization in education.

These wise observations of Dalin and March also suggest that there need be no crisis of confidence in the idea of educational administration as a science, or in the utility of theory as a basis for practice. Irrespective of how educational administrators are trained, and educational systems are structured and managed, public dissatisfaction will continue to manifest itself in one form or another. Such is the nature of educational reality. It is not, and never will be, orderly, stable, and equilibrial. It is, and ever will be, "seething and bubbling with change, disorder, and process". There is chaos in educational systems: an orderly chaos. There is order in educational chaos: a chaotic order. Educational administrators do not need to panic in the face of this chaos. Politicians do not need to exacerbate it.

Scholars in the discipline of educational administration do not need to be alarmed about it either. They need not indict their own intellectual efforts to understand educational administration, nor the efforts of those who have gone before them. They do not have to press with a sense of urgency and speed for the

reform of professional development programs. That is merely a form of self-protection which is no longer necessary.

There may be manifest - worldwide - public dissatisfaction with schools and school systems. This may also have coincided with a growing realization that the field of educational administration was, like society itself, "too large and too complex to be immediately understandable" (Luhmann, 1984, p.59). But then there have long been calls for a synthesis to make sense of it all.

In the very first volume of the *Educational Administration Quarterly* (EAQ), Gregg (1965), in reviewing the 1964 National Society Yearbook on educational administration, had this to say:

> Useful concepts, such as decision-making, leadership and organizational equilibrium are explained but they are treated in relative isolation from another. The relationships among the concepts are not at all clearly delineated and there appear to be no ultimate criteria to which concepts may be related and tested. Each author probes into a significant aspect of the total realm of administration in accordance with his own interests and methods. As a result there remain significant gaps to be closed before administration can be viewed as having attained the status of a practice based on science (p.47).

It seems that some fifteen years later certain gaps still remained to be closed, as Griffiths (1979) reiterated in the EAQ Herda's observation that: "Analysis and synthesis of studies and findings are lacking" (p.43). In the following year Willower (1980) pointed out one way in which such a synthesis might be achieved, namely, by "using system type frameworks and drawing on research already done" (p.2). Yet the problem has persisted. Hoy (1982) has since asserted: "Systematic and cumulative knowledge building are conspicuously absent ..." (p.4); and Tom (1987) has quite recently stressed the need from the practitioner's point of view for inquiry into both teaching and administration which properly recognizes "the synthetic, context-sensitive as well as empirical" dimensions of teaching and administrative practice. Thus, the chorus of demand for synthesis has been swelling. Yet synthesis has seemed to be inaccessible.

The Possibility of a Synthesis

It seems to me that a cogent synthesis will soon be achieved. The new naturalism promises not only a synthesis of the natural and social sciences, but also a synthesis of thought in our own discipline. Thus the historic transformation of

science, which the new naturalism represents, could transform thinking in our discipline. Our efforts to understand educational administration could at last become truly scientific. We need no longer cling stubbornly, as Ryan (1986) argues we have done, to a model of science geared to the machine, and to the predictable control of the machine for output. Machines are not natural. They are not alive. Our world is both. Our students, our schools, our school systems, are alive. So are our language, our culture, our society. Our systems of thought, including our discipline of educational administration, are living systems too. And science has at last begun to grasp the basic principles on which living systems operate. They are self-renewing and self-organizing.

What Will Our Reaction Be?

Will we ignore what is happening out there? Perhaps! We did manage to ignore the first great scientific revolution of this century: Einsteinian relativity. That triggered profound changes in such concepts as space and time. Scientific understandings of such notions as objectivity and causality were revised. The picture of the world as a machine - a mere mechanical assemblage of which people were only objects among the rest, to be controlled or to control - was set to disappear. The Cartesian view of the universe as a great machine, governed by impersonal forces and inexorable laws, became outmoded. But we took little notice. We clung to a machine-like image of our world (Ryan, 1988).

We also largely managed to ignore the second great scientific revolution of our times: quantum theory. The quantum principle shattered the Cartesian partition between the 'I' and the world, between the observer and the observed. The Newtonian dream of a controllable measurement process just made no sense to scientists any more. The world no longer sat 'out there'. The word 'observer' had to be crossed out in favour of 'participator' (Wheeler in Mehra, 1973, p.244). Objectivity was recognized as illusory. Was it so in educational administration? Or is it not still the case that the truly scholarly research in educational administration is that quantitative research which can lay claim to scientific objectivity? We have been slow indeed to respond to fundamental changes in scientific thinking.

Yet it was not only in the natural sciences that man's understanding of the universe was revised. Near and far were pushed together in space-time: similarly, foreground and background were pushed together in modern art. The emphasis became the creation of a pictorial whole. So also did the fragmentary world of Cartesian man come to be denied in philosophy. Man became, at least for the existentialists, not only a thinking creature, but a Being in the World who had flesh and blood, who laughed and cried, felt angry and sad - a whole person. Modern literature has pursued the fate of this Being. It has drawn a stark picture,

relentlessly highlighting the darkness and the disorder in life, the desperate search for meaning, the chilling realization that men and women must either succumb to the reality of living which confronts them or overcome it through self-determination. Though some attention has recently been paid to the problem of meaning, in general, this is not the image of human beings which has been reflected in contemporary educational administration literature

To Think By Way of Homology, Not Analogy

However, we do have another chance. A new way of thinking about human life is emerging. It is a way which recognises man and his human systems as profoundly natural. The much proclaimed difference between the natural and the social sciences is set to disappear. This does not mean that the social level of reality is to be reduced to the physical level. Rather, a new link between the two has been discovered. Further, this link is *not* being made by way of analogy. It is not being said that social systems *are like* natural systems: that organizations, for example, *are like* organisms. Such *analogies* have been prominent in the literature for many years. Rather the link between natural and social reality is now being made, not by way of analogy, but by way of homology. Principles at many different levels of reality, once seen as analogous or similar, are now seen to be homologous - the very same. It is now being discovered, that the same basic dynamics underpin *both* natural *and* social life. These are the dynamics of the dissipative structure: the dynamic of autopoiesis or self-renewal, of order in chaos; and that of autocatalysis or self-organization, order out of chaos.

The New Advance in Systems Thinking

The discovery of the dissipative structure is really only a recent advance in systems thinking.

The notion of systems is quite familiar to everyone in educational administration. It is a term widely used in practice; it also has theoretical significance. Theorists used to think of systems as closed, and thus irreversibly doomed to a slow evolution towards total entropy or total disorganization. Then they began to think of them as open: a notion developed by the German physicist Kohler in 1924; taken up by the biologist Von Bertalannfy (1950); and then, *but only by way of analogy,* in the study of societies and organisations by such scholars as Parsons (1956), Simon (1957), Beer (1959) and Ackoff (1968).

But these theorists considered the proper state of systems to be that of equilibrium. The idea of maintaining a social system in balance has been a recurring theme in the literature (Barnard (1938), Cyert and March (1958), Chaffey

and Tierney (1988)). However, the new scientists of chaos have now discovered that the characteristic state of most systems is one far from equilibrium. Most systems are always out of kilter, always subject to fluctuations. These fluctuations the systems can usually dampen down - but sometimes they fail. However, this does not mean living systems can only descend into an entropy or total chaos. They are dissipative structures. They continuously dissipate the entropy building up in them, either by getting rid of it at one level of operation, or by moving to a new level of operation and surviving there.

That is the point of the 'Greenhouse Effect'. Concern about the over-heating of the earth's atmosphere has been signalled around our globe. But this may-day call is not for our planet earth. It is for us humans, and the plant and animal species with which we share our planet. We may have denuded the earth of its forest cover, polluted the oceans and the atmosphere, poked catastrophic holes in the ozone layer, but our planet earth is a living system. If it cannot manage to dampen down the fluctuations which our heedless actions have caused, even if they continue to escalate, the earth as a living system will still survive. But in so doing it might have to move to a new, qualitatively different level of operation. We may not be a part of that operation. It is for us, then, and for our survival that the alarm bells ring.

That one can write about the 'Greenhouse Effect' in the context of a paper on educational administration is itself indicative of that remarkable confluence of thought which is now occurring in the natural and social sciences. Living systems are now seen to be operating, not just on analogous, but on homologous principles. Living systems are quite different from non-living systems, such as machines. Living systems are self-renewing and self-organizing. They are geared primarily to their own survival. They are dissipative structures. They can import energy and export entropy. Non-living systems, such as machines, are not so geared. They are organised in a technology, operate on engineering criteria, and are programmed to produce an output.

Students and Teachers Alive!

Now, though the staff and students in educational systems might sometimes seem more dead than alive, they are living systems, not non-living ones.

Students, for example, are living systems not geared primarily to produce any output, but to ensure their own survival and maintenance. The truth of this is easily verified in any Australian classroom, where the disadvantaged child - aboriginal or poor white - is simply not coping. One little piece of received wisdom in instructional theory is that all students have some drive to be competent at their

studies. Thus the challenge to the teacher is simply to nourish and sustain that drive (Bruner, 1966).

However, as my own research has shown, the critical question for many disadvantaged children is less that of being competent than of being impotent (Sungaila, 1979). These children feel helpless, powerless, and quite uncertain about how to cope with the forces which often are pushing them around. Competence for these children is not a matter of achieving anything, but simply of surviving - both in school and out. One of their keys to survival is outright rebellion. Other strategies used to avoid failure are these: acting stupidly; forgetting assignments; mislaying books or tearing them up; losing pencils or breaking them; never beginning or never finishing the tasks set; or rushing through them regardless of the outcome so that they can quickly absent themselves from the painful scene of 'learning'. What these children choose to do, and they *do choose* to do it, has its own logic, even though their choices may not make much sense, either to their classmates or the teacher!

Organizations Alive!

Just as these children choose to act in ways which appear to them to promise the least disappointment, so do we and so do our educational organizations. Like all living systems, educational organizations have a purpose and mind of their own. Of course, some scholars in educational administration might take exception to this view. For them, as for other leading scholars such as Popper and Hayek, it might be sensible to talk about individual students and teachers making choices, but naive reification to talk about organizations or districts or whole systems making choices. Such scholars insist that it is the way individual human beings choose that really matters; and further, that to replace the notion of individual human choice by that of organizational or systemic choice is not to yield any deeper understanding of educational administration. It is merely to raise the discussion to a level of abstraction far removed from the realities of organizational life.

A Holistic, not Reductionist, Approach

These views, of course, reflect a methodological individualism and a reductionism *to which the new naturalism is philosophically opposed.* This reductionism has also been evidenced in systems thinking, as anyone who has struggled through Miller's (1978) tome on living systems will testify. The living systems of the new naturalism, with their characteristically dissipative structures, are quite different from Miller's "living systems". They are not to be broken apart, down and down and down into their tiniest, irreducible little bits: from the

supranational system, down through society, organizations, groups, organisms, and organs to cells. A disparate collection of staff and students can become a corporate body, and when it does, its choices are seen as more than the mere sum of the choices of individuals.

A simple example of this is the choice of a corporation to declare a dividend. Each member of the board of directors can choose to have a dividend declared, but "only the board as a collectivity is empowered to declare a dividend. The collective action is thus qualitatively different from the human actions, which, in part, constitute it" (Fisse and Braithwaite, 1988, p.479). In any event, March and Olsen (1984) have expressed the view that:

> Whether it makes pragmatic theoretical sense to impute interests, expectations, and other paraphernalia of coherent intelligence to an institution is neither more nor less problematic, *a priori*, than whether it makes sense to impute them to an individual (Ranneman, 1982, March and Shapira, 1982). The pragmatic answer appears to be that the coherence of institutions varies but it is sometimes substantial enough to justify a collectivity as acting coherently.

The new naturalism recognizes the coherent action of the living collectivities. It suggests that living systems can and do choose from among possibilities. They choose meaningfully: that is, on their own terms. Choosing is not easy, because every living system exists in a world of possibilities - the grand total of all the possibilities in the system and in its environment. The choices to be made are complex. Not every possibility can be realized. Choosing is also very risky. Haunting every choice made is that ghost of what might always have been possible otherwise (Luhmann, 1985).

However, living systems characteristically do not panic in the face of all this complexity and contingency. Typically, they do not make arbitrary or irrational choices. To us the choices they make may appear strange, but to them they are sensible. The point is worth reiterating. Living systems make choices which are meaningful to them, choices which appear to minimise the risk entailed in choosing, because they promise less disappointment than other possibilities. These choices may appear to be irrational, arbitrary, radical or incremental. On the other hand, they might pretend to a measure of scientific rationality. It really does not matter. The choices that living systems make are sensible.

The 'Natural' Dimension of Institutions

Organizations alive? Organizations, living systems? Organizations determined to renew themselves and so survive? If you are prepared to accept that, then you may have parted academic company with Popper and Hayek and some of your scholarly colleagues in educational administration. You are, nevertheless, placing yourself amongst other equally respectable scholarly company. The theory of institutions might still be regarded as being in its adolescence (Scott, 1987), but institutional theorists have long since pointed to the 'natural dimension' of institutions, that dimension which is the institution's concern with its own self-maintenance as an end in itself. More than three decades ago Selznick (1957, p.17) noted that, over time, organizations set up for the performance of some technical task can become institutionalised and can pursue, as their major goal, their own self-maintenance. However, Selznick did not explain how an organization can become infused with such a sense of its own value.

The Development of an Institutional Order

Various attempts have been made since to explain how an institutional order comes to prevail. One, which indeed has inspired much of the scholarly debate in educational administration over the past fifteen years, is that institutionalisation is a process which occurs in three stages. People interact. In so doing they create a social reality external to themselves. They then internalize this reality and take it for granted. People in institutions adjust their behaviour to conform with this reality (Berger and Luckmann, 1966).

However, a much more recent interpretation regards institutionalisation as only part of the process which allows living systems, continuously faced with complex and risky choices, to deal with such choices meaningfully - that is, so as to minimize the risk of their being disappointed because of the choices they have made (Luhmann, 1985). Meaningful choice involves a process of self-reference. Living systems, with their characteristically dissipative structures, are self-referential. That is to say, each living system makes its choices from among all the possibilities in its world, its system and its environment. To do so it "refers to its own identity...copes with its own complexity...uses a simplified model of itself to orient its own operations" (Luhmann,1984, p.66). This simplified model of itself in living social systems is, Luhmann (1985) suggests, constituted by complex structures of expectations, which have been reduced to norms. The possible risk in making any choice can be assessed, because structures of expectations indicate the possible outcome of choices. These structures of expectations are gradually

stabilized along three dimensions: the temporal, the social and the material. The process of institutionalization operates to stabilize the social dimension.

Exploring the Notion of Structures of Expectations

These structures of expectations are quite complex. In fact, they are so complex that it is not possible to trace them down through all the different levels to which they might reach. That is why they are, in reality, reduced to norms.

For example, few would dispute that there is an accepted way of writing an academic paper. The choices that one makes in writing a paper are governed by structures of expectations. At any level these expectations are reflexive, not merely reciprocal. That is to say, it is not just a matter of what I expect of you, which governs the way I choose to write my paper, nor of what you expect of me. I expect you can read. You expect I can write. But my writing of this paper does not mean that you will read it. I must take account of what I expect you, as a reader, to expect. That is not hard to gauge even from the antipodes!

The prevailing expectations of the writer of an academic paper are quite clear. Hence, I expect you to expect that any paper you choose to read will be written in a scholarly fashion. If, in your view my paper is not scholarly, it is unlikely that you will persist in reading it, or indeed, ever have had the opportunity of beginning to read it in the first place. The structures of expectations governing the choices that one makes in preparing a scholarly paper have long since been reduced to these norms: "a degree of rigour; an open-minded, self-critical attitude to one's work; careful research; careful thought; careful, clear writing up: these are the essence of scholarship..." (Feldman, 1989, p.508).

Luhmann (1985) suggests how such norms as these come to prevail.

How are Structures of Expectations Stabilized Over Time?

Any structures of expectations, he proposes, are stabilized *over time* because living systems have various ways of dealing with disappointments: the outcomes that - given the prevailing norms - really should not happen, but which in fact do. These ways of dealing with disappointments are such cultural devices as sanctions, the myth, rites and ritual and, I would add, the policy story.

For example, the disappointing fact is that much academic writing in educational administration is not really scholarly at all. Mostly this disappointment is dealt with by rejection of such work for publication - a very salutary *sanction*. But then a good deal of what does manage to be published is not really scholarly

either. This fact is equally disappointing. But the norms of scholarly writing prevail. The paper might purport to present 'hard' data, so the *myth* that it is based on truly objective scientific research might save the day. Or the *rite* of the paper having been a major conference presentation, perhaps even as a 'key-note' paper, might assuage our dissatisfaction with the substance of a less than scholarly piece of work. Then again, that its author has attended assiduously to *the ritual* of citing compendious references to other eminent works might alleviate our frustration, although the paper in fact, contributes nothing new at all to our understanding of educational administration. Again, the editorial *policy story* might save the day: for example, the policy might be that some encouragement by way of publication should be given to those who display some measure of originality in their work, even though their efforts do fall short of prevailing expectations of the scholarly.

The point to note is that all these cultural devices which allow us to deal with a reality which disappoints our expectations, also permit us to maintain those expectations. They help to stabilize our expectations *over time*. Thus the criteria for a scholarly paper today will still prevail tomorrow, next week, next month or next year.

How are Structures of Expectations Stabilized Across Social Space?

But scholars from different schools of thought, different educational institutions and - despite the myth of the universality of scholarship - from different countries, might entertain conflicting notions about which effort is truly scholarly and which is not. How are meaningful selections for publication to be made, that is, those selections which do not prove to be disappointing for the readers? It is here that the process of institutionalization comes into play. According to Luhmann's (1985, pp.49-61) analysis of this process, structures of expectations become stabilized among various potentially conflicting groups, not because of any actual consensus - in this case about what ought to be regarded as scholarly - but because of a presumption that unknown, anonymous third parties would share the opinion that certain works were, or were not, scholarly.

In reality, when it comes to the selection of academic papers for publication, the verdict of third parties, that is, of referees, is in fact usually sought. But in other spheres of activity, such as the practice of educational administration, third parties have many considerations of their own to contend with. They cannot be called upon, in every concrete, disputatious situation to give their verdict as to which party's expectations should prevail. The verdict of any third party has to be presumed. Thus Luhmann (1985, p.50) suggests that "it is the presumed opinion of unknown, anonymous third parties that is represented by the institution". Through the process of institutionalisation, structures of expectations remain

socially stable, and serve to guide the selection of meaningful choices by living, social systems.

There need be no real agreement that expectations are shared, only a presumption that they are. On the basis of this presumption, structures of expectations can survive the impact of people's moods, preferences and impulses, their leaving an editorial board, for example, or their joining it (or their leaving one school staff and joining another). Were such structures of expectations, however, to rely on real consensus about what ought to be considered scholarly, for example, quite clearly such real consensus would founder, with changes in mood, preference and so on. Such a consensus would also have to be renegotiated with every change in personnel.

Maintaining or Undermining the Presumed Consensus

The mere presumption of consensus is very vulnerable. To maintain the illusion, as much as to destroy it, depends on communication. Language will be effective in maintaining or destroying that presumption of consensus, where the influence of authority, reputation and expertise can be effectively exerted. This is likely to be the case where the institution is neither large nor complex (Luhmann, 1985). However, in large and complex organizations, power must be exerted if the presumption of consensus is to be maintained, or if it is to be undermined. This, in turn, calls for political activity. If it is a matter of maintaining the illusion of consensus, the power play is likely to be subtle and covert. But if it is a case of destroying that presumption of consensus, then political activity is likely to be much in evidence. There will be overt attempts to raise the level of dissatisfaction within the institution. New actors will enter the arena, new alliances will be forged, new communication channels adopted. Those who support 'the cause' will be appointed to key positions and those who do not, if they cannot be removed from their present posts, will be marginalized. Juridical officers within the institution may become involved: union officials, industrial officers, grievance mediators, equal opportunity personnel, safety officers, or the institutional ombudsman. Political power may also be imported from outside the institution. Matters may be taken before statutory tribunals, even before the courts.

The Function of Organizational Structure

Often, too, an attempt will be made - at the same time - to restructure the entire organization, or at least to revise radically its standard operating procedures. What is true of a publishing organization is also true of all other institutions including educational ones.

Much has been made in the educational administration literature of the structure of organizations, but all too often, I think, the key point is overlooked that structure *is* function, that organizational structure functions to channel and control communication. Such channelling and control is needed to maintain the illusion, the presumption, that everyone agrees with the prevailing structures of expectations.

For example, bureaucracy has been lauded for decades as the ideal organizational form. This seemed to be the case because it was the structure of some of the most successful institutions that have ever been known - the Church, the army, the hospital, the prison - despite the fact that all these institutions had very different goals. However, was it the bureaucratic structure that was the key to organizational efficiency and effectiveness? Or was it that the structure functioned to channel and control communication within the organization so effectively that it was difficult to expose the fact that there was no real consensus prevailing among interested parties? In other words, could it be that the bureaucracy was, and still is, an ideal set-up for maintaining the presumption that anonymous third parties - inaccessible, unassessable, unquestionable, even faceless third parties - agree with the current structures of expectations?

Contemporary evidence for this claim is that those educational systems which have maintained a highly bureaucratic structure appear to be in far less ferment that those which have weakened their organizational bulwark to the point of decentralization, even local participation. On the other hand, if a bureaucratic structure cannot channel and control communication so as to dampen down dissatisfaction, then to decentralize the structure may be the only viable way of containing its incipient disorder. Decentralization providing for participation compromises protest: the protest of students, of parents, of teachers, of different cultures, of different races, even of secessionist groups. Look across the educational world from Spain to Vanuatu. Focus your attention on what is happening in Australia. The evidence is there.

The Role of Educational Research

There is another weapon which is often used by those engaged in the battle of either maintaining or undermining that presumption of consensus which sustains structures of educational expectations in their social dimension. That weapon is research. The results of research can be used to heighten dissatisfaction with the status quo, and gain support for the creation of a new order. Educators often wonder why the research they do has little or no impact on what happens in educational institutions. It is not really such a great mystery. If the results of the research can be used to sustain the presumption - that the prevailing structures of

expectations are producing sound choices for teaching and learning - these results will be utilized. Most evaluation research falls into this confirmatory category. Politicians and bureaucrats want supportive evaluation. They do not want recommendations for change.

Politically circumspect educational researchers do not venture to give them any. Neither do their reports include any negative findings. These artful persons know that no evaluation study with negative results is ever likely to be published. Indeed, they are only too well aware that the researcher who naively produces such work is likely to find that the educational system concerned not only refuses to publish the research report, but promptly imposes, as well, the most severe sanctions it can devise - ridiculing the research methodology, placing an embargo on any further publication, denying any further access to research in the organization, even threatening to take the hapless researcher to court. On the other hand, it is not unusual - for politicians at least - to insist on large-scale standardized testing so as to prove to the voting public that what their departments are doing is appropriate; or that what they intend them to do by way of reform is long overdue.

Research does have its place, not in the search for truth, sadly, but in the battle for victory. Let the neophyte educational researcher beware!

The Significance of Policy

The development of policy can also be a tool for maintaining the presumption of consensus or exposing it as nothing more than that. Its use to this end becomes more obvious, perhaps, in the exposure phase, particularly where new policies are introduced which call for new operating procedures. One good example of this is the policy decision to introduce corporate planning into an institution. The corporate nature of this planning strategy calls for concerted consideration of overall institutional aims and objectives. It changes all manner of things in the organization. It breaks up old alliances. It requires new relationships to be formed among individuals and groups. It introduces new priorities, new goals, and new roles. It demands new information flows and new patterns of decision-making. It highlights conflict within organizations, particularly when it comes to the allocation of resources. But in its linchpin, the budget, it takes a very firm rein on a new presumption of consensus. What has been planned and budgeted for is no longer negotiable. It can only be shown to have been achieved.

How are Structures of Expectations Stabilized in the Material Dimension?

The choices that living institutions, and the individuals in them, make are not guided only by structures of expectations, reduced to norms and stabilized in the temporal and social dimensions. They are also stabilized in the material dimension. That is, they materialize or take shape, as they are identified, stored and made accessible in persons, roles, programs and values (Luhmann, 1985).

Thus the great scholars of all time personify what is scholarly, just as certain educational administrators give *personal,* charismatic testimony to the norms which guide their administrative practice. *Roles* have long since been recognized in the literature as bundles of expectations. The performance of a role can be anticipated with little disappointment, though many different individuals might occupy that role in turn. Thus, though successive editors of the same academic journal might interpret their roles slightly differently, what they do will be determined by what they expect their editorial board and readership to expect. Likewise, what successive principals choose to do in the management of their schools will vary from person to person, but again their choices will be determined by what they expect their educational authorities, their staff, their students, their parent body and their school community to expect.

Expectations can also be identified by *programs* or rules which define which actions are correct, for example, in teaching or learning, hiring, promoting or developing staff. Then there are *values*. These identify structures of expectations at the most abstract level and thus, counter to many assertions to the contrary in the current educational administration literature, are the most difficult to affect. Values express "points of view regarding the preferability of actions" (Luhmann, 1985, p.69). However, values do not specify what course of action to take. For example, retaining all students till the end of their secondary schooling might be valued, but the question remains quite open as to which particular actions should be taken to achieve this. Indeed, it is problematic whether any action to boost retention rates should be taken at all, when a significant number of the parents of potential early school leavers, at least in Australia, do not value the completion of secondary school for their children.

Structures of expectations can thus be fixed and identified in persons, roles, programs or values. All four, singly or together, stabilize structures of expectations by allowing for their clear identification, storage, and access. They thus allow living systems, as characteristically dissipative structures, to deal with the disorder within - the *real disappointment* and the *actual dissensus* - by

contributing to the stabilization of those structures of expectations which guide living systems to make meaningful, that is, relatively disappointment-free, self-renewing choices.

The Practical Point of This Discussion

A Guide to Action

We have been exploring the new naturalism, the emerging synthesis of the natural and social sciences with its touchstone, the living system - characteristically a dissipative structure which is self-renewing and self-organizing. Now to what practical point does all this discussion lead us? The point is this. Educational administrators are dealing with living systems. If they wish to persuade living systems to make the choices they want them to make, then they must try to understand what stable structures of expectations are already guiding the choices which those living systems are currently making. They must participate in the maintenance of those structures of expectations or in their destabilization and re-creation. Otherwise, the same choices will continue to be made in respect of teaching and learning as have been made before, despite ministerial interventions, administrative directives, community participation, systemic restructuring, or the appointment of new persons, the creation of new roles, the development of new programs or the espousal of new values.

In the introduction to this paper it was suggested that the new naturalism promised not only a synthesis of the natural and social sciences, but also a synthesis of contemporary thought in educational administration. Educational administrators want to persuade other living systems - the school authority, the regional supervisor, peers, staff, students, parents and the community - to make the choices which administrators perceive should be made for better teaching and learning. So they must deal in culture - in myth, rite, ritual and sanction; and in politics - in communication and the exercise of power. They must be personally what they want others to choose to be. They must create appropriate roles, develop suitable programs and espouse the right values. In acting thus they might just be able to affect those structures of expectations which guide the choices other living systems make. Clearly such action as this also reflects a synthesis of major strands of contemporary thought in educational administration: the cultural, the political and the material: the identification of structures of expectations in persons, roles, programs and values.

The Principle at Work

Let us see how such action works in practice.[1] Suppose an educational system adopts as its policy the 'normalization' of handicapped students. Ostensibly the system really wishes to persuade its colleges to provide appropriate educational services for disabled students, as they are expected to be doing for all able-bodied and able-minded students. It would clearly not be enough simply to create a new role, for example, that of 'disability consultant', and hope that institutional choices will promote the disabled students' educational opportunities.

Rather, the myths, rites, rituals and sanctions which currently favour the institutional neglect of those students would need to be identified, challenged and replaced. Further, the presumption that the needs of disabled students are already being adequately met would need to be disclosed for what it is - a mere presumption. This would call for the analysis of the key players and their relationships, the identification of the stakeholders within and without. Latent dissatisfaction about the education of the disabled would need to be articulated. An internal, critical mass of actual, express dissent would have to be created. Strategies would need to be adopted to reinforce that dissent: participation, networking, coalition building, negotiation, bargaining and exchange. Extra-mural support may also need to be sought: the mobilization of public opinion, of citizens' rights advocacy and of legislative change.

The vision of a new educational deal for the disabled would need to be personified. New programs for their teaching and learning would need be developed; and the new values of 'normalization' would need to be preached in every systemic contact with the colleges - through meetings, telephone calls, memos, newsletters and in the public media.

However, if a system is not really concerned to influence the choices its colleges make with regard to their disabled students, then it can again act in the temporal, social and material dimensions *to maintain the prevailing structure of expectations*. It can allow the colleges to cope with the disappointing reality that adequate educational services *are not being provided* for disabled students, as the 'normalization' policy suggests they *ought to be* in the following ways. The *myth* can be invoked, either that the disabled are ineducable anyhow or that, if they are not, the system can cope with an influx of such students and will do so. True a *policy* on the education of such students may appear in the government gazette, and the goal of equality of opportunity for those with a physical disability or intellectual handicap may be incorporated in the systemic corporate plans. That action creates at least the illusion that something is being done about 'normalization'. There may also be a *ritualistic* accounting of progress. Calculations can be made. An increase

in enrolments of the handicapped may be able to be demonstrated. The wider range of subjects they are now enrolled in may be publicized. Their graduation rates may be ceremoniously celebrated. Such ritualistic accounting, however, makes it easier to avoid that vital question as to whether or not the educational programs into which the disabled students have been inducted really do meet their learning needs. It also conveniently begs a question of even greater significance. Has the level of disability of the students, which determines their enrolment in such programs, ever been properly assessed? After all, intelligence quotient scores, on the basis of which developmental disability is classified, mostly rely on verbal disability. Yet functional disability and the student's motivation to learn should surely also be considered.

Of course, if the educational system ought to be providing a proper program, and its colleges clearly are not, then their failure to do so can be sanctioned. However, the institutions can deal with such sanction. They can readily excuse themselves. If they have been given no extra funding for the planned integration, what more could they be expected to do for their disabled students than they already are? They need more time. They need more space. They need all sorts of new facilities - from special toilets to recording equipment. They need more staff. They need different staff development programs. The supervisory staff in the sheltered workshops and adult training centres need special training too. Clearly without extra funding it is not possible to do any of these things.

By using such cultural devices as myth, ritual, policy story and sanction, the system is able *to cling to the norm* that, in its colleges, disabled persons *ought* to be provided with appropriate educational services, *in the face of the disappointing reality that they are not.* In this way the system can dissipate the disorder which the policy of 'normalization' has introduced: the heightened expectations and consequent frustration of the parents of the disabled students; the discontent of the students themselves - particularly noticeable where the physically disabled are treated in the same fashion as the intellectually disabled; the frustration of the advocates for the disabled; the disillusionment of the disability consultants; and the regret of the sheltered workshops and adult training centres. In short, the great disappointment of it all can be dampened down. Despite the potentially disruptive trend which the 'normalization' of the education of the disabled might appear to represent, the system can and does go on much as it did before, renewing and maintaining itself as a globally stable structure over time.

But the system must also be able to maintain *the presumption of consensus* that what its institutions are doing for the disabled is what they ought to be doing. To this end it can persuade the minister to fund the one-off, visible, vote-catching

college initiative for the education of the disabled. It can displace the interest of its key personnel in the disabled students' cause by allowing the staff involved with them to build up a directorate of special training programs - an organizational empire true, but not one established for the service of the disabled. It can isolate its disability consultants and downgrade their lines of reporting - from access to the chief executive officer - to the director of special training programs. It can set the citizen advocates for the disabled at loggerheads amongst themselves. It can insist that the adult-training centres, the specialist workshops, and the community nurses continue to maintain their day-care programs for the disabled. Thus its colleges can get on with the job the system perceives they were set up to do - to train or re-train the able-minded and able-bodied for employment.

The system is alive. It has made its choice - the least disappointing for itself in 'normalization' policy circumstances. It can survive, maintain and renew itself: that is, it can go on doing what it has always done!

The Moral of this Experience

No living system, with its characteristically dissipative structure, will ever move to a qualitatively different level of operation whilst it can successfully dampen down the fluctuations within. However, should those fluctuations 'get out of hand', the system's self-organizing capacity comes to its rescue. Order is brought out of chaos as the system moves over the threshold into a qualitatively different regime.

In living social systems the fluctuation which leads from one regime to another does not overrun the initial state in a single move. It comes from within - perhaps as the result of the creative and often morally courageous input of a single individual. It is reinforced by its own successful impact, winning the support of others and creating a nucleus of change. This nucleus grows until it reaches the critical size which is needed to compete with and overcome the integrative power of the dissipative structure, the power to maintain the particular dynamic regime in which it is currently operating (Sungaila, 1989).

This suggests, for example, that no 'normalization' policy for the education of the disabled will ever create a qualitatively different educational regime for them. Just a few persons are needed, from within the colleges themselves, who can find the high ground, and stand on it courageously for the disabled: drawing attention to their educational abuse; raising the uncertainty of their categorization; challenging the prevailing wisdom about their educability; articulating and defining what remains implicit and left unsaid about the support services they need. Those few persons must have a fierce determination that what *should be* for the education

of the disabled *will be*. They must be able to win support, thus bringing their small "nucleus of change" to that critical size where the status quo can no longer dampen it down. That change must be directed by their vision for the disabled.

They must also realize that they are trying to influence the choices of living systems in favour of the disabled. They must understand the structures of expectations that determine current choices, and the cultural, social and material devices upon which the stability of those structures of expectations depends. That is to say, they must understand and combat the living system's self-renewing dynamic, because it is that which is designed to dampen down the very 'waves' they are creating. They must act culturally, socially and materially to influence choice by changing prevailing structures of expectations with regard to the disabled, expectations about what they can be taught and what they can learn. Only then will the system be pushed over the threshold into a new and qualitatively different educational regime for the disabled.

In summary, the insights which the new naturalism gives us are these. We, in educational administration, are concerned with living systems, *not* non-living systems. Living systems are characteristically dissipative structures. They are not isolated, closed systems in equilibrium, doomed eventually to total disorganization or entropy. They are open systems, far from equilibrium, always out of kilter, but for that very reason able to import energy and get rid of their entropy, or incipient increasing disorganization. They are always in a state of fluctuation, but they remain globally stable. They choose from among the complex and contingent possibilities in the environment to remain that way. They choose to renew themselves. They are autopoietic. If, however, the fluctuations in any one regime cannot be dampened down, because those fluctuations are continuously reinforced from within, then the system will move to a new, qualitatively different regime and become globally stable again at that level. Living systems are not just self-renewing. They are self-organizing.

The New Role for Educational Administrators

Does this then leave any role for administrators to play? Of course! As *managers,* administrators can act culturally, socially and materially to promote a living social system's self-renewal. As *leaders* they can act to provide the individual and often courageous input needed to create that nucleus of change which, driven by the vector of their own vision, will oppose the integrative power of the self-renewing dynamic, and act to undermine it, so that a new qualitatively different educational regime can be achieved. Could it be that in the new naturalism, then, we have not only the key to a *real* science of educational administration, but the key to every would-be educational reformer's dream?

The New Role for the Discipline of Educational Administration

There is still then a great deal for the managers and leaders of educational systems to learn - and even more that we have to find out about living educational systems so that we can teach them. But take heart! The watershed I have been writing about is truly that. It represents not just a confluence of thought in the natural and social sciences, but, better still, the possibility of a marvellous confluence among the various streams of thought in our own discipline. I have not mentioned the word theory once in this paper, but I think that what we were seeking in the grand theory movement is soon to be achieved; or at least something equally elegant and intellectually compelling - *a grand synthesis*.

We owe it to ourselves to grasp this new opportunity: to work to place our discipline firmly on a sound, scientific footing; to create the synthesis that is possible; to marvel at how much we have learned already; and to press forward eagerly to fill the gaps in our knowledge that will emerge. In doing this we can promote the glory of all living systems: ourselves, our students, our staff, our institutions, our educational systems and our discipline. *This is that glory: that they all become more fully alive!*

A Postscript

I would welcome any feedback from anyone, anywhere about what I have written here. My address is c/- D.A.H.A.E.S., University of New England, Armidale, N.S.W., 2351, Australia. My telephone number is Australia 067 732089. My fax number is 067 733122.

NOTE

1. The following comments are largely based on the insights revealed in the following unpublished Master of Educational Administration dissertation: Townsend, R. *An Explorative Study of TAFE's Response to Students with Intellectual Disabilities*, University of New England, 1989.

REFERENCES

Ackoff, R.L. (1960), 'Systems, organizations and disciplinary research', *General Systems V*, 1960.

Barnard, C.J. (1938), *The Functions of the Executive*, Cambridge, Mass: Harvard University Press.

Beer, S. (1959), *Cybernetics and Management*, London: Wiley.

Berger, P.L. and Luckmann, L. (1967), *The Social Construction of Reality*, New York: Doubleday.

Bruner, J. (1975), *Toward a Theory of Instruction*, Cambridge, Mass: The Belknap Press.

Chaffey, E.E. and Teirney, W.G. (1988), *Collegiate Culture and Leadership Strategies*, New York: Macmillan.

Cyert, R.M., and March, J.G., in March, J.G. and Simon, H.A., (1958), *Organizations*, New York: John Wiley and Sons.

Dalin, P. (1978), *Limits To Educational Change*, London: Macmillan Press.

Feldman, D. (1989), 'The Nature of Legal Scholarship', *The Modern Law Review*, 52(4).

Fisse, B. and Braithwaite, J. (1988), 'The Allocation of Responsibility For Corporate Crime: Individualism, Collectivism and Accountability', *Sydney Law Review*, March, 476-513.

Gleick, J., (1987), *Chaos*, London: Sphere Books.

Greenfield, T.B. (1980), 'The Man Who Comes Back Through the Door in the Wall: Discovering Truth, Discovering Self, Discovering Organizations', *Educational Administration Quarterly*, 16(3), 26-59.

Gregg, R.T. (1965), 'Behavioural Science and Educational Administration', *Educational Administration Quarterly*, 1(1), 42-49.

Griffiths, D.E. (1979), 'Intellectual Turmoil in Educational Administration', *Educational Administration Quarterly*, 15(3), 43-65.

Griffiths, D.E. (1983), 'Evolution in Research and Theory: A Study of Prominent Researchers', *Educational Administration Quarterly*, 19, 3, 208.

Holmes, M. (1986), 'Comment', *Interchange*, 17(2), 80-90.

Hoy, W.K. (1982), 'Recent Developments in Theory and Research in Educational Administration', *Educational Administration Quarterly*, 18(3), 1-11.

Jantsch, E. (1980), *The Self-Organizing Universe.*, Oxford: Pergamon Press.

Kohler, W. (1924), 'Die physischen Gestalten in Ruhe und im stationaren Gustand', Enlangun.

Lakomski, G. (1987), 'Values and Decision Making in Educational Administration', *Educational Administration Quarterly*, 23(3), 70-82.

Luhmann, N. (1984), 'The Self Description of Society: Crisis Fashion and Sociological Theory', *International Journal of Comparative Sociology*, xxv, (1-2), 59-72.

Luhmann, N. (1985), *A Sociological Theory of Law*, London: Routledge and Kegan Paul.

Mehra, J. Ed. (1973), *The Physicist's Conception of Nature*, Dordrecht, Holland: D. Reidel.

Miller, J.G. (1978), *Living Systems*, New York: McGraw-Hill.

Parsons, T. and Shils, E.A. (eds.), (1962), *Towards a General Theory*, New York: Harper and Row.

Prigogine, I. and Stengers, I. (1984), *Order Out of Chaos*, London: Heinemann.

Ryan, J.J. (1988), 'Conservative Science in Educational Administration: Knowledge, Power and Truth', *Journal of Educational Administration and Foundations*, 3(2), 5-21.

Scott, W.R. (1987), 'The Adolescence of Institutional Theory', *Administrative Science Quarterly*, 32, 493-511.

Selznick, P. (1957), *Leadership in Administration*, New York: Harper and Row.

Simon, H.A. (1957), *Administrative Behavior*, New York: Macmillan.

Sungaila, H. (1979). '*"I Don't Want To Learn!" : A Study of Country Children*', Armidale: University of New England Press.

Sungaila, H., (1989), 'New Science of Chaos: Making a New Science of Leadership?' Australian Council for Educational Administration. Conference, University of New England, Armidale, N.S.W., September.

Von Bertalannfy, L.T. (1950), 'The theory of open systems in physics and biology', *Science*, 111.

Willower, D.J. (1980), 'Contemporary Issues in Theory in Educational Administration', *Educational Administration Quarterly*, 16(3), 1-25.

FIRST

INTERNATIONAL EDUCATION CONFERENCE

SPONSORED BY THE

NEW ZEALAND PRINCIPALS' FEDERATION

A Conference for PRINCIPALS and TEACHERS everywhere

THEME:

The Information Age and First Principles for Teaching

KEYNOTE SPEAKERS
include

Robert R. Carkhuff
Carkhuff Institute for Human Resources Development
and
Mike Torbe
Centre for Adviser & Inspector Development, Coventry

FURTHER DETAILS AVAILABLE:
Conference Secretary
Point Chevalier School
Te Ra Road, Auckland 2
New Zealand
Phone: (64) (9) 861 359

JUNE 29 to JULY 2 1990

to be held at the

Aotea Centre
Auckland
New Zealand

MARK YOUR 1990 DIARIES NOW !

STUDIES IN EDUCATIONAL ADMINISTRATION

This series is published at Armidale, N.S.W., Australia by the Commonwealth Council for Educational Administration as a service to its members throughout the Commonwealth of Nations and beyond.

It normally appears four times a year.

Papers may be submitted for consideration to the Editor, c/- CCEA, Faculty of Education, University of New England, Australia, 2351. Each paper should be typed, double spaced on one side of the paper only. References should in general appear at the end of the work.

A limited number of back issues is available. These will be sent to CCEA members on payment of postage. Non-members should add $2.50 per copy.

Sponsored by the Commonwealth Foundation.
Printed by The University of New England Printery.